

GEOOMETRY BENCHMARK 3 REVIEW

$$\begin{aligned}\textcircled{1} \quad 5\sqrt{8} \cdot 11\sqrt{6} &= 5 \cdot 11\sqrt{8 \cdot 6} = \\ &= 55\sqrt{48} = 55\sqrt{3 \cdot 16} = \\ &= 55\sqrt{3} \cdot \sqrt{16} = 55\sqrt{3} \cdot 4 = \\ &= 220\sqrt{3}\end{aligned}$$

$$\begin{aligned}\textcircled{2} \quad x_m &= \frac{x_1 + x_2}{2} & y_m &= \frac{y_1 + y_2}{2} \\ x_m &= \frac{-3 + 5}{2} = 1 & (5, -1) \\ & & y_m &= \frac{7 + (-1)}{2} = 3\end{aligned}$$

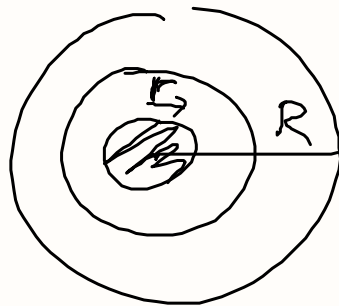
③



$$\frac{3}{7} = \frac{9}{x}$$

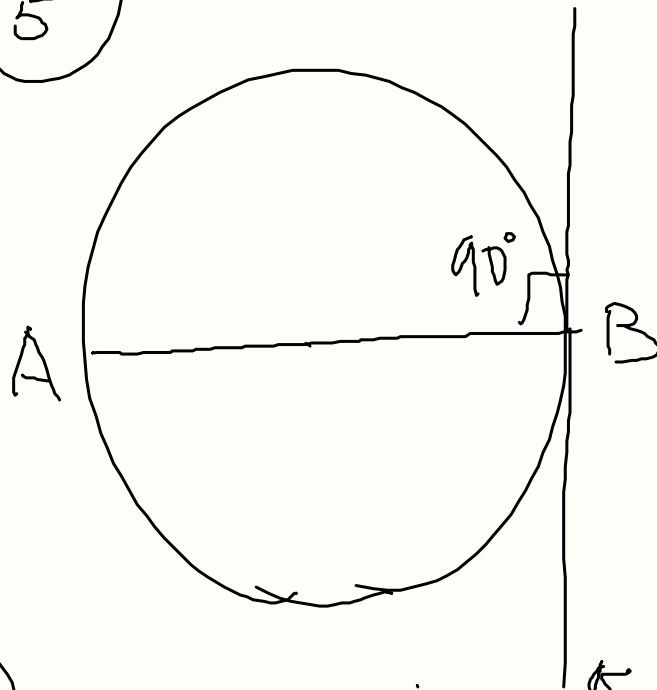
(4)

PROBABILITY



$$\frac{\pi r^2}{\pi R^2} = \frac{r^2}{R^2}$$

⑤

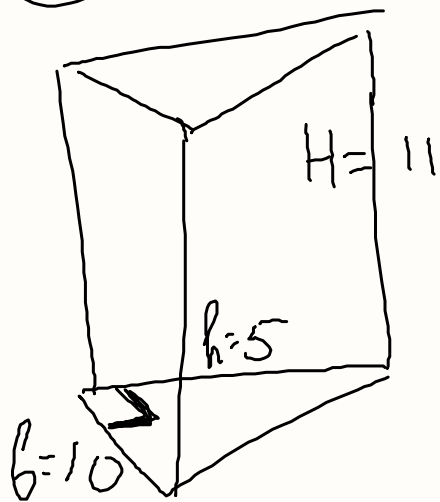


\overline{BK} - TANGENT

⑥

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

8

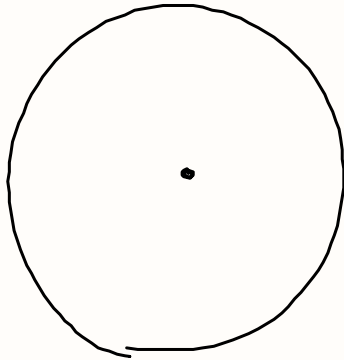


$V=?$

$$V = \frac{b \cdot h}{2} \cdot H$$

(10)

$$R = 10$$



$$\underline{C} = 2\pi R$$

(12)

$$a^2 = c^2 - b^2$$

$$a = \sqrt{c^2 - b^2}$$

(13)

$$\frac{7^9}{7^3} = 7^6$$

14

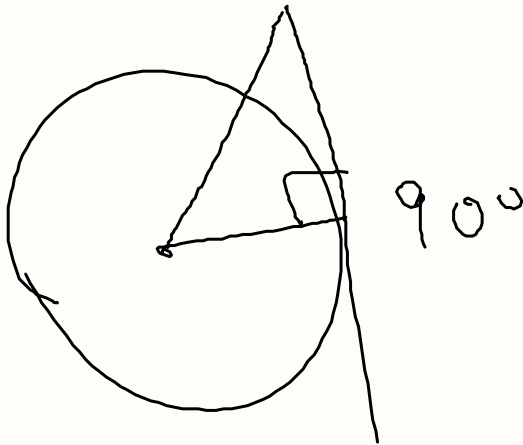
2 3 6

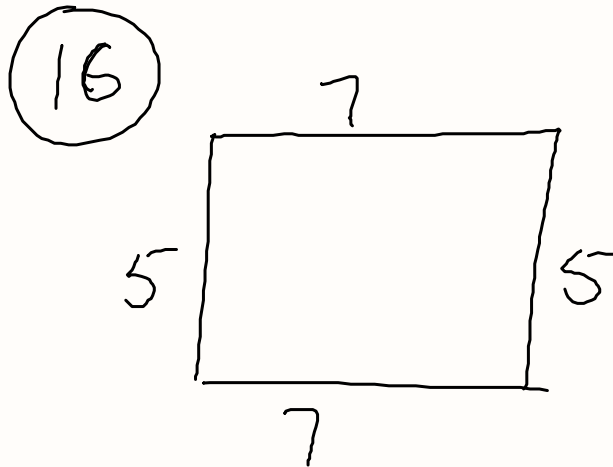
$$2 + 3 < 6$$

CANNOT BUILD
TRIANGLE

$$a + b > c$$

15





PERIMETER = SUM OF
ALL SIDES

#7-17

REVIEW PROPERTIES OF A KITE

(18) VOLUME OF SPHERE

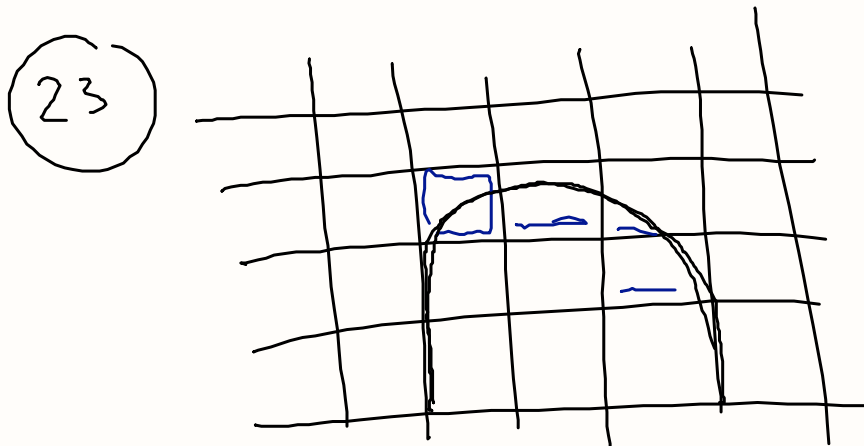
(19) PLUG IN ANSWER IN ONE
OF THE EQUATIONS.
LEFT = RIGHT.

(20) $\frac{\text{CIRCUMFERENCE}}{X} = \frac{360^\circ}{5.0^\circ}$

(21) V_{CODE}

(22) $a^2 = \sqrt{c^2 - b^2}$

$(\sqrt{41})^2 = 41$



5 complete
squares

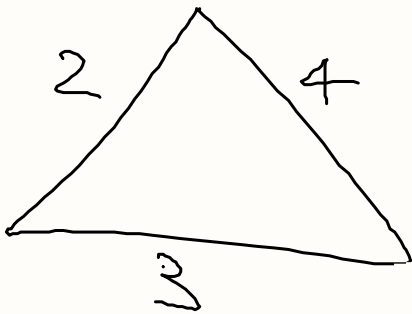
$\frac{4}{2} = 2$

7 square
units

(24)

$$A = \sqrt{s(s-a)(s-b)(s-c)}$$

s - HALF PERIMETER



$$P = 2 + 4 + 3 = 9$$

$$s = \frac{9}{2} = 4.5$$

$$A = \sqrt{4.5(4.5-2)(4.5-3)(4.5-4)}$$

(25)

$$R = \frac{D}{2}$$

$$A_0 = \pi R^2$$

(26)

$$\underline{SA} = 4\pi R^2$$

SURFACE AREA OF A SPHERE
IS 100

$$100 = 4 \cdot 3.14 \cdot R^2$$

$R = ?$

$$R^2 = \frac{100}{4 \cdot 3.14}$$

$$R = \sqrt{\frac{100}{4 \cdot 3.14}}$$

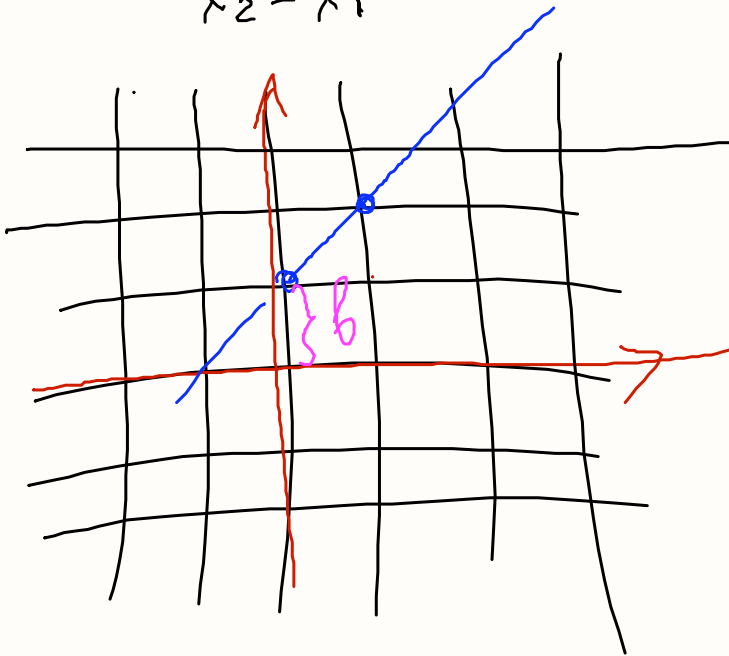
(28) KNOW
PROPERTIES
OF EQUILATERAL
TRIANGLE

29

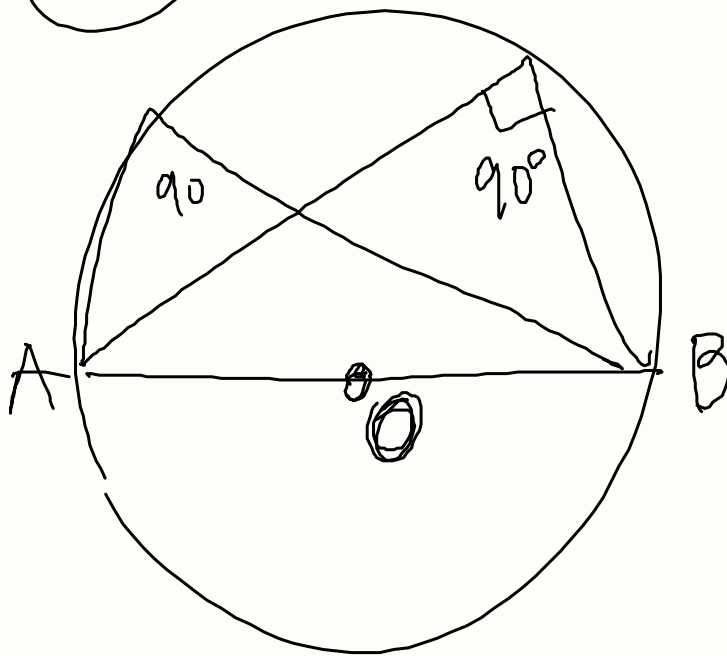
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$y = mx + b$$

$$b = 1$$



30



AB - DIAMETER